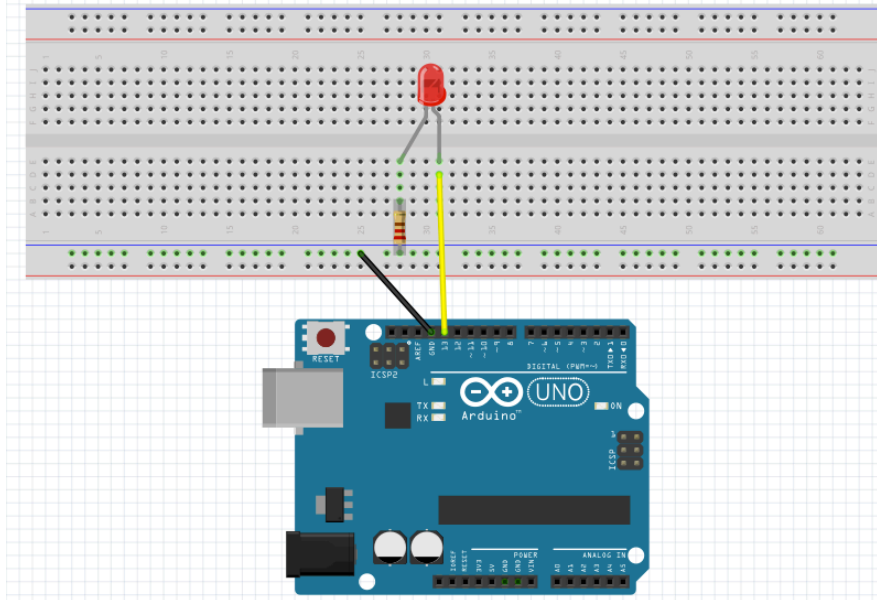


Instruction Sheet

Activity 2: Blink an external LED

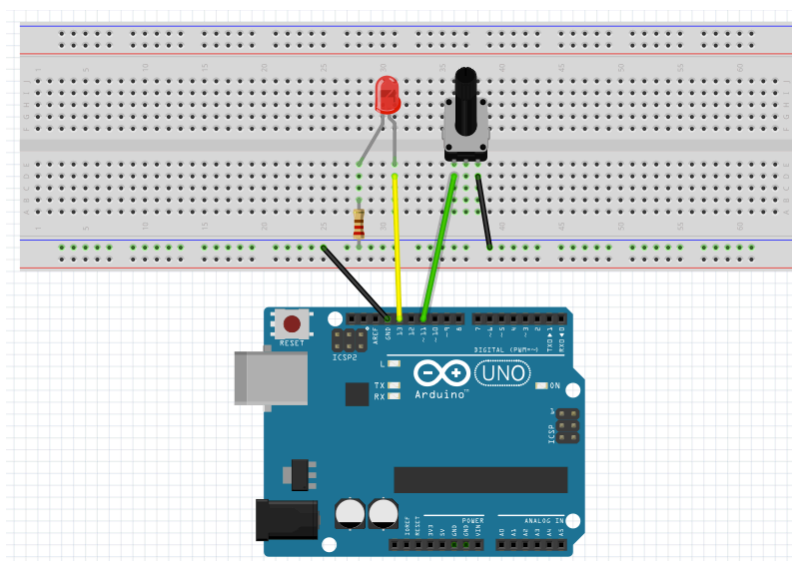
Resistor	Gnd
LED	13

Note: Longer leg connected to pin 13



Activity 3: Controlling an LED with a button

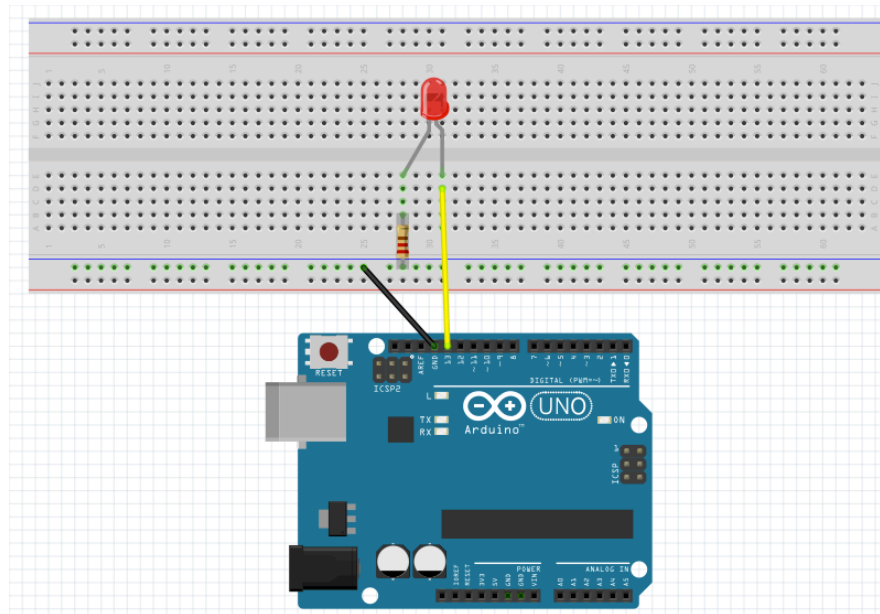
Resistor	Gnd
LED	13
Button	11



Instruction Sheet

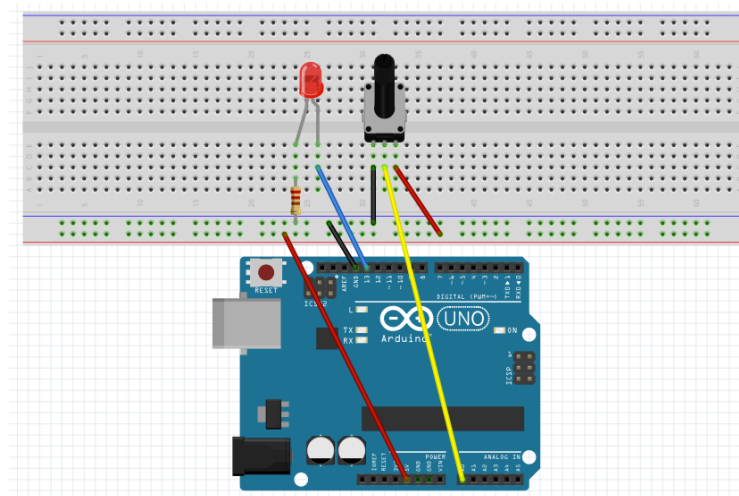
Activity 4: Controlling an LED with PWM

Resistor	Gnd
LED	13
Button	11



Activity 5: Controlling an LED with a potentiometer

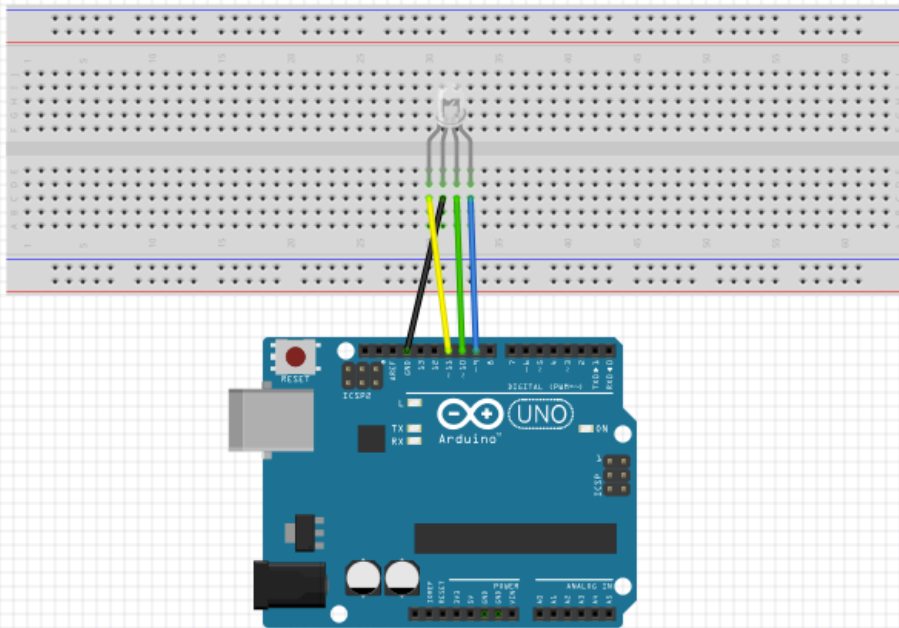
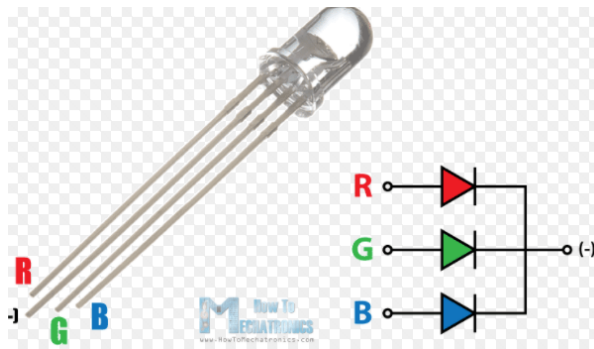
Resistor	GND
LED	13
Potentiometer - middle	A0
Pot – one side	5v
Pot – other side	GND



Instruction Sheet

Activity 6: Rainbow colours (RGB LED)

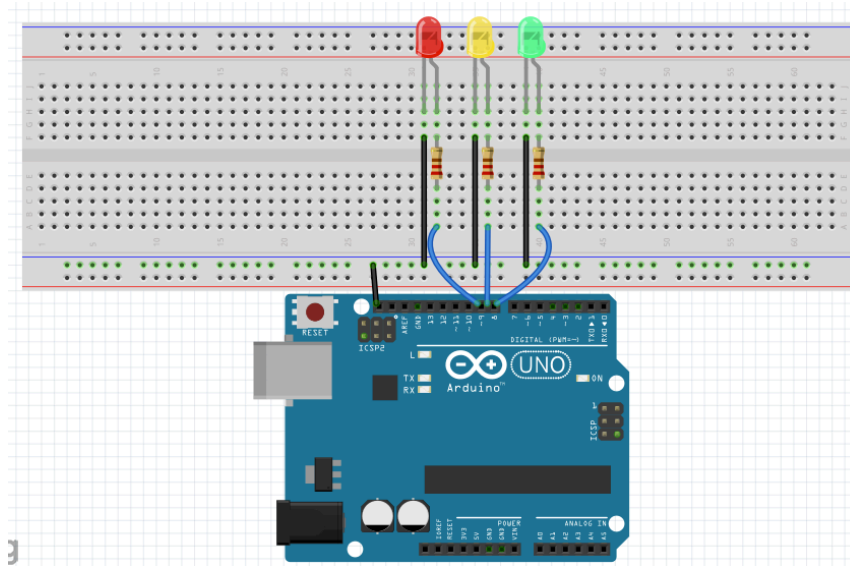
LED	13
Potentiometer - middle	A0
Pot - one side	5v
Pot - other side	GND



Instruction Sheet

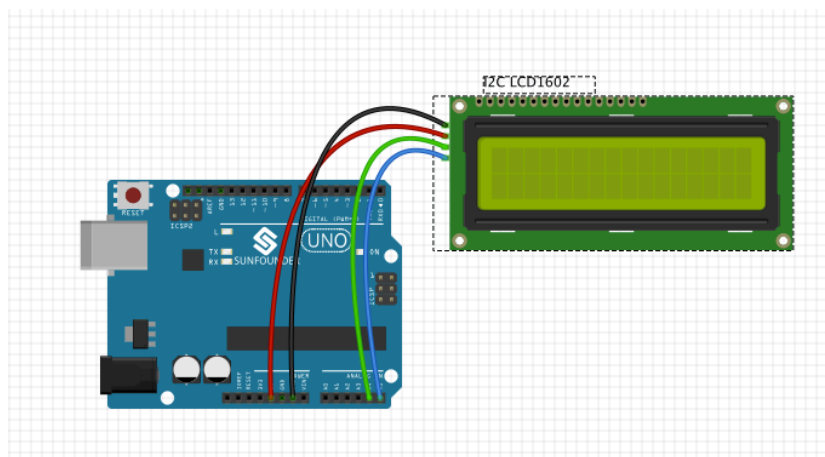
Activity 7: Serial monitor

LED - red	10
LED - yellow	11
LED - green	12



Activity 8: LCD Welcome screen

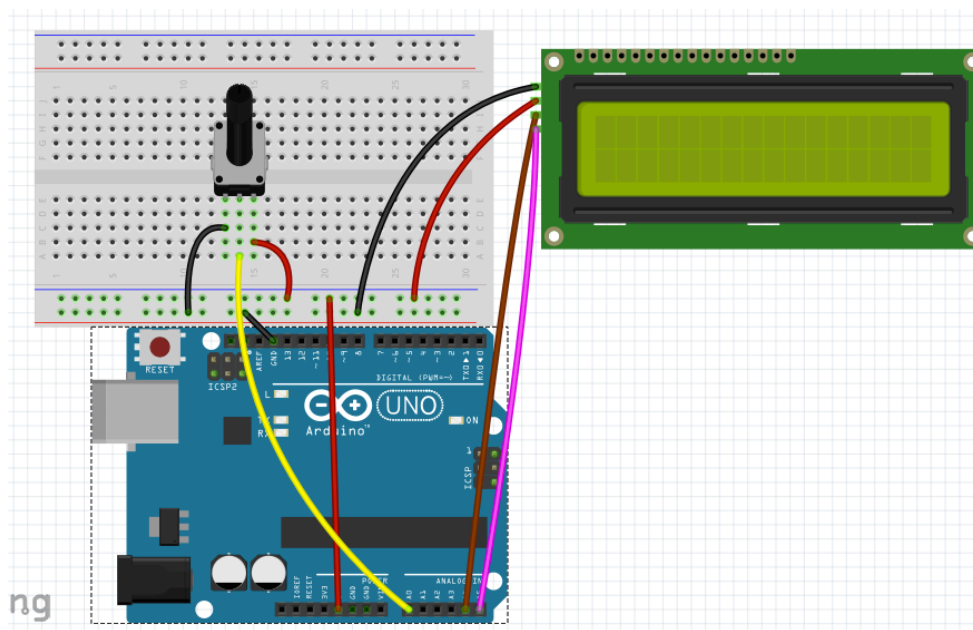
VCC	GND
GND	5v
SDA	A4
SCL	A5



Instruction Sheet

Activity 9: Voltmeter

VCC	GND
GND	5v
SDA	A4
SCL	A5
Potentiometer - middle	A0
Pot – one side	5v
Pot – other side	GND

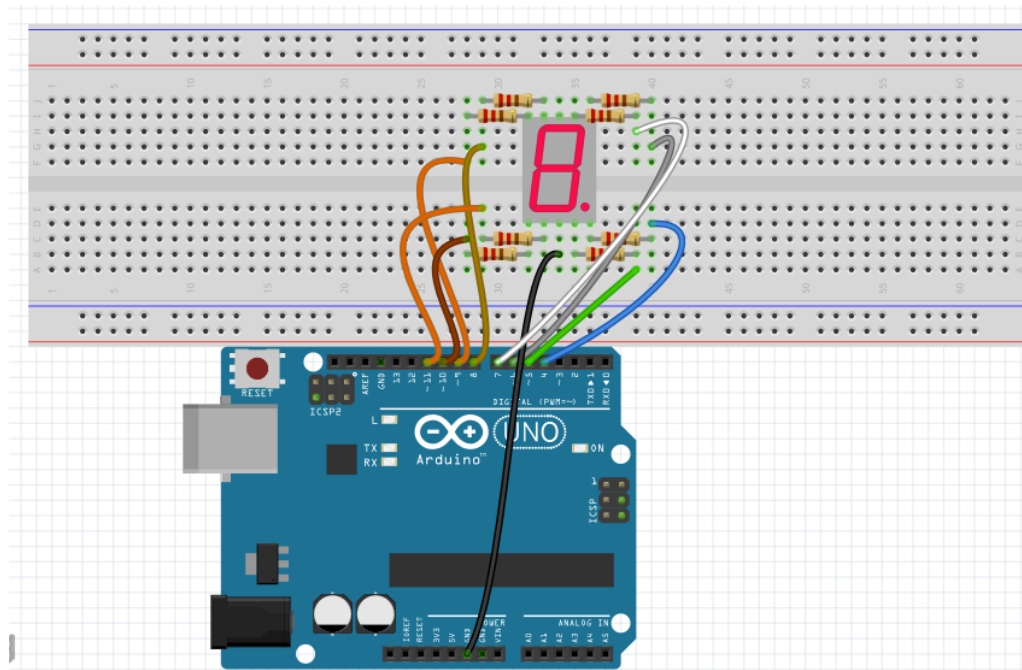
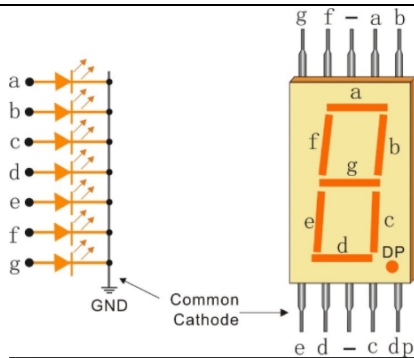


Activity 10: 7-Segment LED

7 – Segment display	Uno
a	7
b	6
c	5
d	11
e	10
f	8
g	9
dp	4
“-“	GND
Each segment is connected through a resistor to the corresponding Uno pin	

The pin diagram for the 7-Segment LED is shown below, showing which pin controls which segment.

Instruction Sheet

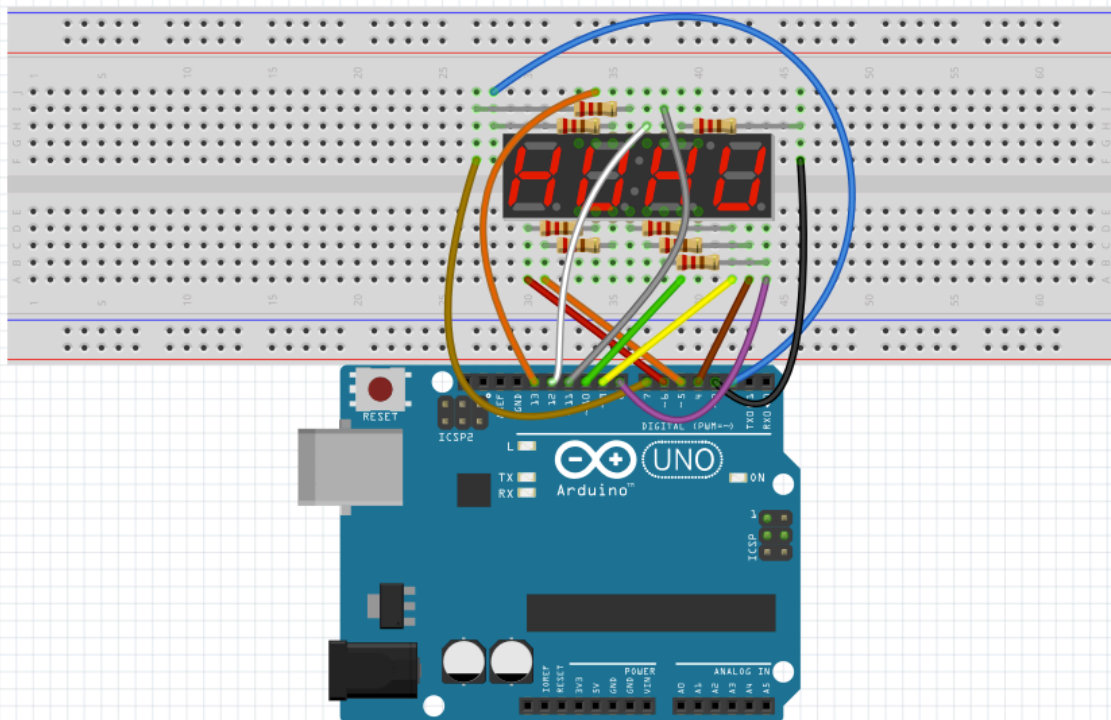
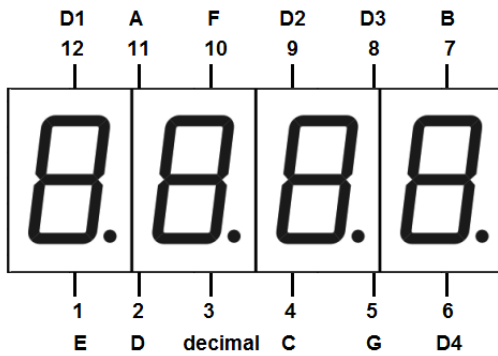


Activity 11: 4-digit 7-segment LED

4 – digit 7-segment display	Uno
a	2
b	3
c	4
d	5
e	6
f	7
g	8
p	9
D1	13
D2	12
D3	11
D4	10

Each segment is connected through a resistor to the corresponding Uno pin

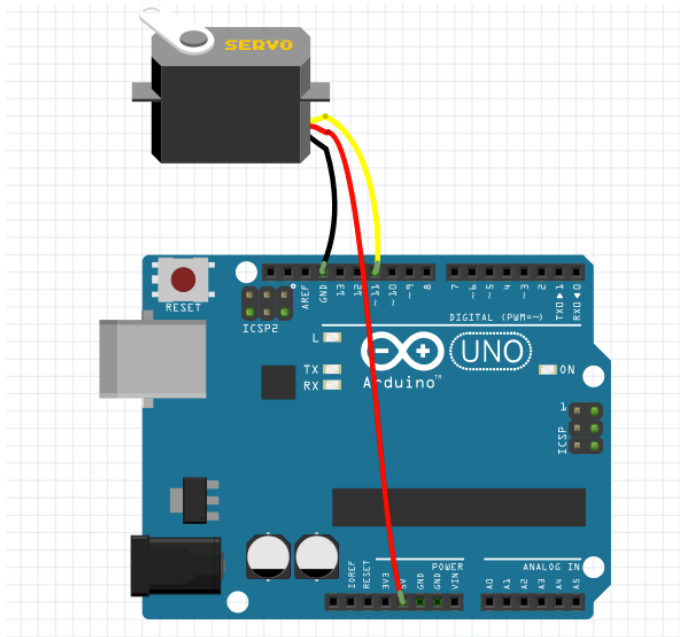
Instruction Sheet



Instruction Sheet

Activity 12: Servo motor

GND (Brown)	GND
Signal (Yellow)	9
Power (Red)	5v



Activity 13: Keypad

Keypad	
Column / Row	Uno
1	11
2	10
3	9
4	8
5	7
6	6
7	5
8	4
LCD screen	
VCC	5v
GND	GND
SDP	A4
SCL	A5

Instruction Sheet



Pin 1 Pin 8
pins 1-4 pins 5-8
are the are the
rows columns

Keypad supplied shown left.

